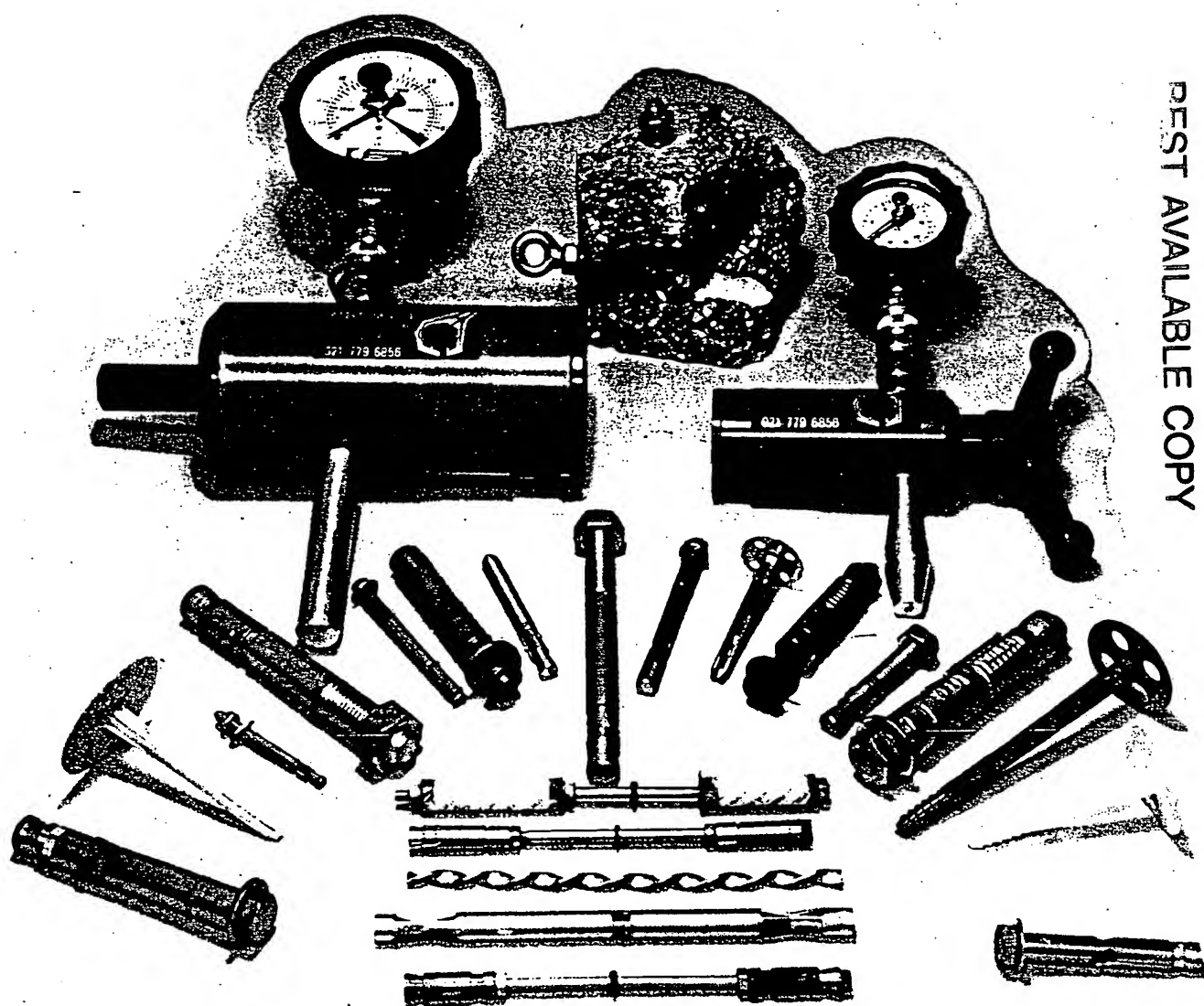




PORTABLE TENSION TESTERS



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HYDRAJAWS TESTING DIVISION

3 TILE CROSS TRADING ESTATE, TILE CROSS, BIRMINGHAM B33 0NW
TELEPHONE +44 (0)121 779 6856/7 FAX +44 (0)121 779 6880

HYDRAJAWS MEDIUM DUTY TENSION TESTERS - to 20kN

LIGHTWEIGHT ROBUST TEST METERS FOR PROOF OR ULTIMATE LOADING OF A WIDE RANGE OF FIXINGS IN CONCRETE AND MASONRY.

Hydrajaws Medium Duty Tension Testers enable engineers to confirm the holding power of anchors in most construction materials, either for the purpose of establishing safe working loads or to validate the correct installation of existing fixings. The 5kN version is ideal for testing remedial wall ties and is approved by all major manufacturers and installers.

The tensile load of up to 20kN is applied to the fixing mechanically, hydraulics are only used to register the load, making the Hydrajaws Medium Duty Tester ultra reliable as it is not prone to hydraulic leaks.

The choice of 4 gauge capacities means the precision of readings can be optimised for each application. The load spreading BRIDGE and PYRAMID STOOL keep reaction loads away from the fixing. M16 fixings may be located directly in the tester while a variety of adaptors enable a wide range of other sizes to be tested.

Available as a Standard kit with one, fixed gauge or a Master kit with 2 (or more) interchangeable gauges.

GAUGE FEATURES

- Maximum load indicator
- Rubber casing protects against shocks
- Shatter proof glass
- Built in protection against sudden load release
- Calibrated in kN
- Calibration certificate supplied with every gauge.

APPLICATIONS

Proof and failure load testing of a wide variety of fixings including:*

- Most small and medium sized expanding and resin anchors.
- Frame anchors, screw fixings, cavity fixings.
- Remedial wall ties (in accordance with DD140)
- Safety anchorages for industrial harnesses (to BS 5845)
- Safety anchorages for scaffold ties (to BS 5973)
- Safety anchorages for ladder restraints.
- Powder actuated fastenings.
- Industrial fasteners.

*Special adaptors may be required for some of these applications, Hydrajaws will be pleased to advise on this.

TESTER FEATURES

Patent No. 8622835

- 0-20kN range
- 4 gauge capacities:
0-5, 0-10, 0-15, 0-20 kN
- Interchangeable gauges with quick release couplings (Master Kit only)
- Movement indicator scale
- Lightweight aluminium body
- Weight 2.2kg

MOVEMENT INDICATOR SCALE

Enables "First movement" to be demonstrated and gives warning of limit of stroke (16mm) which must not be exceeded.

MODEL RANGE AND ACCESSORIES

1. STANDARD TESTER KIT

Model	Load Range kN	Gauge Divisions kN
0087/1	0-5	.2
0087/2	0-10	.5
0087/3	0-15	.5
0087/4	0-20	1.0

Kit includes:

Tester and fixed gauge with maximum load indicator, padded steel carrying case, operating instructions and 12 test adaptors: 6 Threaded Adaptors: M4, M5, M6, M8, M10, M12
6 Plain Slotted Adaptors with internal diameters: 4.5, 5.5, 6.5, 8.5, 10.5, 12.5 mm
Shipping Weight of Standard Tester Kit = 4.5kg

Options not shown

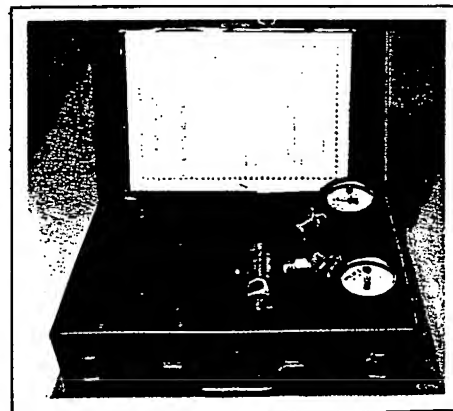
- Digital electronic readout.
- Ratchet and nut to replace handwheel for locations with awkward access.

2. MASTER TESTER KIT MODEL 0087C

Kit includes:

Tester with 2 interchangeable gauges* with Quick Release couplers and maximum load indicators, padded steel carrying case, set of 12 test adaptors (6 threaded and 6 plain) as in standard kit, operating instructions.
Shipping Weight of Master Tester Kit = 5.5kg.

*Specify 0-5, 10, 15 or 20kN gauges when ordering.



Master Tester Kit

Accessories for Standard or Master Testers

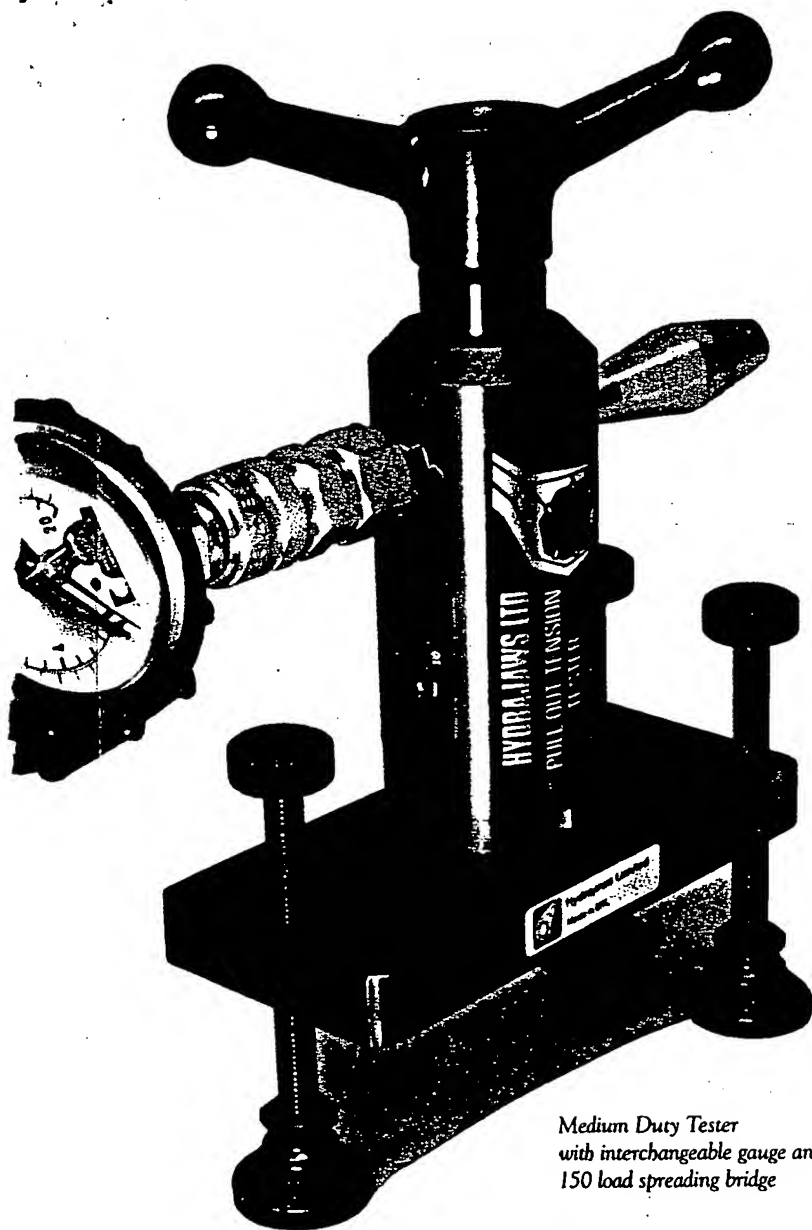
- Load spreading BRIDGE.
- Load spreading PYRAMID STOOL.

Testing Adaptors

- M6 Wall Tie adaptor for MALE threaded wall ties.
- M6 Wall Tie adaptor for FEMALE threaded wall ties.
- Spiral wall tie adaptor.
- M12, M16, M20 Threaded adaptor.
- 5/8" Whit.
- Insulation fixing adaptor.



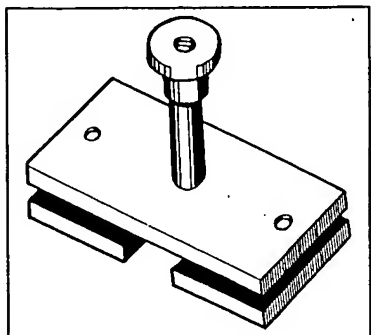
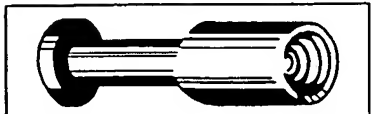
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Medium Duty Tester
with interchangeable gauge and
150 load spreading bridge

TESTING ADAPTORS

M12, M16 & M20 Threaded Stud adaptor

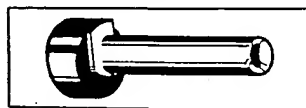


Insulation fixing
adaptor.

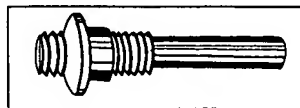
FOR OTHER ADAPTORS

- See general purpose testing accessories sheet
- Safety eye bolt and ringbolt accessories sheet
- Remedial wall tie testing accessories sheet

Spiral wall tie adaptor



M6 Wall tie adaptor for MALE threaded ties.



REACTION LOAD SPREADING

To test correctly reaction loads must be taken into the structure well away from the fixing. In brickwork this can be achieved by spanning the brick under test, with the load spreading BRIDGE. For anchors set in concrete BS 5080 (Methods of Test for Structural Fixings in Concrete and Masonry, Pt. 1 Tensile Loads) sets limits which are provided by the load spreading PYRAMID STOOL.

LOAD SPREADING PYRAMID STOOL

- Offset mounting gives closest edge distance of 100mm.
- Braced tripod withstands full 20kN load.
- Pulling adaptor replicates tester.
- Drilled for attachment to tester for easier sits handling, (Allen screws and key provided).
- M16 legs offer 140mm height adjustment.
- Support to fixing distance = 160mm, meeting the spacing requirements of BS 5080 Pt. 1 for anchors with hole diameters up to 20mm and embedment depths up to 80mm. This means most M12 and some M16 anchors can be tested to the BS.
- Large handwheels on legs for easy adjustment.
- 50mm diameter feet minimise bearing pressure.
- Swivel feet take up uneven surfaces.
- Locking nuts maintain height adjustment.
- Specifications: Height = 275 to 415mm. Width over feet = 380mm. Weight = 6.0kg.



Load Spreading Pyramid Stool

LOAD SPREADING BRIDGE

- 3 Adjustable legs allow 62mm height adjustment.
- Robust construction allows full 20kN to be applied.
- Drilled for attachment to tester (Allen screws & key provided).
- Key hole slot allows easy linkage to fixing or adaptor.
- All metal swivel feet compensate for uneven surfaces.
- 35mm dia. feet minimise pressure on delicate finishes.
- Arrangement of feet allows spanning of brick in masonry tests.
- Narrow width allows testing to within 32mm of edge if required.
- Meets BS5080 spacing requirements for fixings with hole diameters up to 8mm and embedment depths up to 32mm.
- Specifications: Height = 43 - 95mm. Width = 75mm. Length = 170mm. Weight = 2.2kg.

SAFETY WARNING - When testing fixings to failure in wall or soffit situations take care to support the tester and bridge in the event of sudden failure.

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HYDRAJAWS HEAVY DUTY TENSION TESTER - 90kN

A COMPACT PORTABLE TESTMETER FOR PROOF OR ULTIMATE LOAD TESTING OF A WIDE RANGE OF HEAVY DUTY FIXINGS.

The 90kN range of Hydrajaws Heavy Duty Tester, with interchangeable 30 and 90kN gauges, has been designed to meet the demand for proof and ultimate load testing of the larger construction fixings.

An optional Heavy Duty Load Spreading Bridge directs reaction loads away from the fixing while the accompanying Pulling Frame enables fixings to be tested in a realistic condition to demonstrate first movement and clamping force.

Load application is achieved via a ratchet handle driving a 4:1 hydraulic multiplier; the applied load being recorded directly on a gauge mounted on the tester body. This results in a compact design which is lighter and more convenient to use than separate hydraulic pump and ram arrangements. Integral movement indication is provided allowing "First movement" to be identified as well as total displacement before failure.

TESTER FEATURES

- Accepts M24 anchors direct, other sizes via adaptors.
- 4 Threaded adaptors supplied: M12, M16, M20, M24
- Movement indicator scale (10mm movement limit)
- 0-30 and 0-90kN ranges, gauge divisions 5kN.
- Ratchet handle operation for reduced effort.
- 2 gauges supplied as standard.
- Quick release gauge couplings.
- Weight 7.0kg.

APPLICATIONS

- Proof and Failure load testing of most fixing types:-
- High Load Expanding and Resin anchors.
- Cast-in Sockets and Channel.
- Holding down bolts for Stanchion base plates, Machinery, Crane rails, etc.
- Anchorages for Crash Barriers and Safety Fences.
- Anchorages for lifting equipment.
- Anchorages for Stadium Crush Barriers.
- Structural connections, Cladding fixings, etc.

GAUGE FEATURES

- Calibrated in kN.
- Shatter proof glass.
- Maximum load indicator.
- Rubber shock proof casing.
- Red sector warning protects against over load.
- Built in protection against sudden load release.
- Calibration certificates supplied with every gauge.

SAFETY WARNING - When testing fixings to failure in wall or soffit situations take care to support the tester and bridge in the event of sudden failure.

Printed by Rotadex Systems Limited, 3/5 Fortnum Close, Kitts Green, Birmingham B33 0JL. Telephone (0121) 783 7411

MODEL RANGE AND ACCESSORIES

HEAVY DUTY TESTER KIT - MODEL 0093

Kit includes:-

Tester with 2 interchangeable gauges, 0-30 and 0-90kN ranges; padded steel carrying case; ratchet handle; calibration certificates; operating instructions; set of 4 threaded adaptors:- M12, M16, M20, M24. Shipping weight of complete kit = 16.5kg.

Accessories

- Heavy Duty Load Spreading Bridge.
- M20 Pulling Rod and Threaded adaptors for M12, M16, M20 and M24 projecting stud anchors.
- Pulling Frame with 4 plain adaptors of 13, 17, 21 and 26mm int. dia. to test fixings in torqued condition.

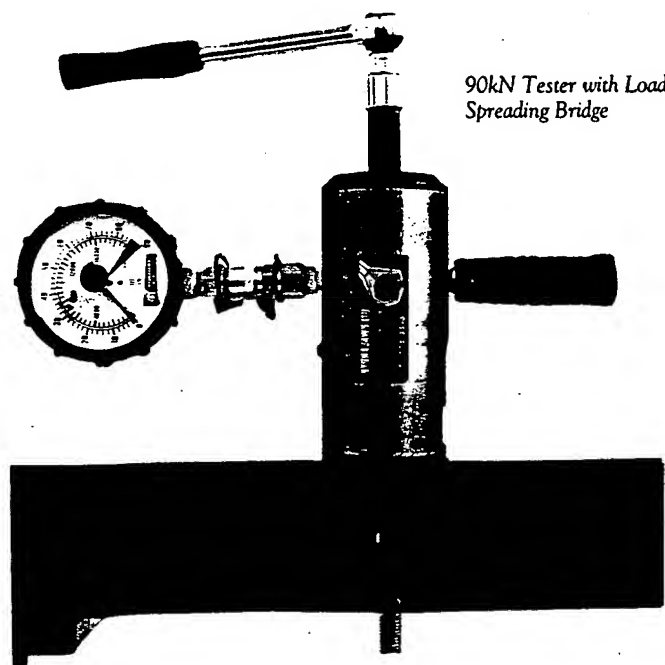
HEAVY DUTY LOAD SPREADING BRIDGE AND PULLING FRAME

- Square hollow section for high strength/low weight.
- Fixing to support distance = 242mm, meeting the spacing requirements of BS5080 Pt 1 for anchors with hole diameters to 25mm and embedment depths to 100mm. Tests most M16, M20 and some M24 anchors to the BS.
- May be attached to Tester.

Detailed specification sheet available.

PULLING FRAME

- Allows demonstration of first movement and clamping force.
- Accepts anchors with sleeve diameters of 33mm directly and smaller diameters via plain adaptors.
- 4 plain adaptors to suit M10 to M24 anchors.



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